

7674

Material Data Safety Sheet

CONFORMS WITH OSHA FORM OMB NO. 1218-0072

May be used to comply with
OSHA's Hazard Communication Standard,
29 CFR 1910.1200. Standard must be
Consulted for specific requirements.

9740132 / RA34365
9740133 / RA34366

SUPER-DUTY NON-FLAMMABLE THINNER

IDENTITY (As Used on Label and List)

Super-Duty Non-Flammable Thinner

Date Prepared: 01/02/2009 – Revised: 01/07/2016

Section 1

Person Preparing Document: D.M. Wamser

Manufacturer's Name

Dural Company, Inc.

Emergency Telephone Number:

CHEMTREC 1-800-317-9643

Address (Number, Street, City, State, ZIP Code)

5724 W Florist Ave.

Telephone Number for Information:

1-414-466-7060

Milwaukee, WI. 53218

Section 2 – Hazardous Ingredients / Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))

<u>INGREDIENTS</u>	<u>CAS NUMBER</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>PERCENT</u>
Dichloromethane 1 (Methylene Chloride)	000075-09-2	25 PPM	50 PPM	100%

Classifications of the substance or mixture

Regulation US CFR 1910.1200

Carc. 2, Skin Irrit 2, STOT SE 3

Section 3 – Physical / Chemical Characteristics

Form: Volatile liquid

Color: Clear

Odor: Sharp penetrating

Boiling Point (for Product) : 40.00 Deg C

Odor Threshold (ppm): approx. 200ppm

Vapor Pressure (for Product): 355 @ 20 Deg C, 529 @ 30 Deg C

Melting Point: (Deg C): -97

Vapor Density (AIR = 1): 2.93

Specific Gravity: 1.32 (Water = 1 at 4 Deg C)

Solubility (water): slightly soluble, 1.3% at 25 Deg C)

Solubility (other): Miscible with most organic solvents

Additional properties: Flash point (BS EN 22719:1994) : None

Small Scale Test for Combustibility (BS 3900):

Non-combustible.

Explosive limits (Company test method) :

SUPER DUTY NON FLAMMABLE THINNER

At 25 Deg C LEL 18.8% v/v, UEL 19.5% v/v
At 50 Deg C LEL 17.5%, v/v, UEL 20.1% v/v
At 100 Deg C LEL 16.1% v/v, UEL 21.5% v/v

Section 4 – Fire-Fighting Measures

Extinguishing Media: Normal extinguishing media. As appropriate for surrounding fire. Water spray should be used to cool containers.

Special hazards arising from the substance or mixture: Explosive mixtures of methylene chloride and air can be formed, but are difficult to ignite and require high intensity sources of heat, such as welding arcs, sparks and flames or high temperatures and pressures; addition of small amounts of flammable substances to methylene chloride (such as flammable liquids or gases) and / or an increase in the oxygen content of the local atmosphere, may strongly enhance these effects. Thermal decomposition and burning will evolve toxic and corrosive vapors of hydrogen chloride and phosgene. Containers may burst if overheated due to thermal expansion of the contents.

Firefighting Procedures: Wear self-contained breathing apparatus and full protective clothing must be worn in fire conditions

NFPA Codes: Health – 2, Flammability – 1, Reactivity – 0

Section 5 – Stability and Reactivity Data

Reactivity: Keep away from direct sunlight, keep away from moisture.

Chemical Stability: Stable in the presence of inhibitor

Possibility of hazardous reactions: Forms a detonable mixture with nitric acid. May react with certain amines, e.g. polyurethane catalysts

Conditions to avoid: Avoid contact with heat and ignition sources

Incompatible materials: Prolonged contact with aluminum or light alloys may cause a reaction resulting in the generation of hydrogen chloride gas and heat

Section 6 – Health and Hazard Data

Label elements

Hazard statement(s)	H315: Causes skin irritation H319: Causes serious eye irritation H335: May cause respiratory irritation H336: May cause drowsiness or dizziness H351: Suspected of causing cancer
----------------------------	---

Signal word(s)	WARNING
-----------------------	---------

Precautionary statement(s)

P260: Do not breathe mist/vapors/spray

P262: Do not get in eyes, on skin, or on clothing

P271: Use only outdoors or in a well-ventilated area

P280: Wear protective gloves/protective clothing/eye protection/face protection

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

SUPER DUTY NON-FLAMMABLE THINNER

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Additional label requirements: None

Other hazards: Continued or high exposure by inhalation will cause anesthetic effects. This may result in a loss of consciousness and could prove fatal. Methylene chloride is converted to carbon monoxide in the body, which reduces the oxygen carrying capacity of the blood. Due to the risk of explosion DO NOT weld, cut or burn drums or other vessels which contain or have contained methylene chloride.

Description of first aid measures:

- Inhalation** Remove patient from exposure, keep warm and at rest. Administer oxygen if necessary. Apply artificial respiration if breathing has ceased or shows signs of failing. In the Event of cardiac arrest apply external cardiac massage. Obtain immediate medical Attention.
- Skin Contact:** Remove contaminated clothing. After contact with skin, wash immediately with plenty of water. If symptoms (irritation or blistering) occur obtain medical attention.
- Eye Contact:** Immediately irrigate with eyewash solution or clean water, holding the eyelids apart, for at least 10 minutes. Obtain immediate medical attention.
- Ingestion:** Do not induce vomiting. Provided the patient is conscious, wash out mouth with water and give 200-300 ml (half a pint) of water to drink. Obtain immediate medical attention.

Most important symptoms and effects, both acute and delayed

High atmospheric concentrations will lead to anesthetic effects and adverse effects on the central nervous system. Symptoms may include lightheadedness, nausea, vomiting and headache. Exposure to concentrations of 1000ppm for 20 minutes causes lightheadedness. Continued or high exposure by inhalation will cause anesthetic effects. This may result in a loss of consciousness and could prove fatal.

Indication of any immediate medical attention and special treatment needed

Remove contaminated clothing immediately. In case of accident by inhalation remove casualty to fresh air and keep at rest. Seek medical treatment when anyone has symptoms apparently due to inhalation., contact with skin or eyes, or swallowing. Adrenaline and similar sympathomimetic drugs should be avoided following exposure as cardiac arrhythmia may result with possible subsequent cardiac arrest.

Section 7 – Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Ensure suitable personal protection during removal of spillages. Do not breathe vapor. Avoid contact with skin and eyes.

Environmental precautions

Avoid release to the environment. Use appropriate containment to avoid environmental contamination.

Methods and material for containment and cleaning up

Do not allow to enter drains, sewers, or watercourses. Adsorb onto earth or sand and remove to safe place. Transfer to a container for disposal or recovery.

SLIPER DUTY NON-FLAMMABLE THINNER

Additional Information

Spillages or uncontrolled discharges into waterways must be alerted to the Environment Protection Agency or other appropriate regulatory body.

Section 8 – Exposure Controls/Personal Protection

Exposure Controls

Appropriate engineering controls

Provide adequate ventilation to ensure that the occupational exposure limit is not exceeded

Personal Protection

Eye/face protection

Wear eye/face protection.

Skin protection

Wear suitable protective clothing and gloves. Gloves should be changed when permeation is likely. PVC has breakthrough time of approximately 5 minutes for methylene chloride. PVA gives longer protection, but is weakened by alcohols and water and will provide less effective protection as a result. Check with protective equipment manufacturer's data.

Respiratory protection

Wear suitable respiratory protective equipment if exposure to levels above the occupational exposure limit is likely. Positive air supplied RPE is recommended.

Section 9 – Handling and Storage

Precautions for safe handling

Do not breathe vapor. Use only in well ventilated areas. The vapor may be invisible, heavier than air and spread along ground. Avoid contact with skin and eyes. Keep away from sources of ignition – No smoking.

Conditions for safe storage, including any incompatibilities

Keep only in the original container in a cool, well-ventilated place. Keep away from direct sunlight. All bulk storage vessels should be made of steel and require a suitable vent or pressure relief valve and secondary containment to prevent uncontrolled losses from accidental release. Do not use aluminum or its alloys in the construction of storage vessels, pipework and ancillary equipment., including internal components e.g. pump impellers. Due to the risk of explosion DO NOT weld, cut or burn drums or other vessels which contain or have contained methylene chloride.

Section 10 – Toxicological Information

Test result / data

Acute oral toxicity

The swallowing of small splashes is unlikely to cause any adverse effects. Large amounts may produce internal irritation, nausea, vomiting and diarrhea and can lead to drowsiness and unconsciousness. LD50 (rat, oral) greater than 2000 mg/kg

Acute inhalation toxicity

High concentrations of vapor may be irritant to the respiratory tract. High atmospheric concentrations will lead to anesthetic effects and adverse effects on the central nervous system. Symptoms may include lightheadedness.

SLIPED DUTY NON FLAMMABLE THINNER

Exposure to high atmospheric concentrations (less than 1000 ppm) methylene chloride may cause lightheadedness. Exposure to very high concentrations may result in loss of consciousness and may cause an abnormal heart rhythm and prove suddenly fatal. Methylene chloride is converted to carbon monoxide in the body, which reduces the oxygen carrying capacity of the blood. This is reflected by a raised carboxyhemoglobin concentration in the blood.

Value used for Chemical Safety Assessment LC50 (8 hr mouse) 46230 mg/m

Acute dermal toxicity	Can be absorbed through skin but not in sufficient amounts to cause adverse effects. LD50 (rat, dermal) greater than 2000 mg/kg bw
Skin irritation	Irritating to skin. Will remove the natural greases resulting in dryness, cracking and dermatitis. Repeated and/or prolonged skin contact may cause reddening, burning and blisters.
Serious eye damage/irritation	Irritating to eyes
Respiratory irritation	Classified as irritating to the respiratory system
Sensitization	Skin: No animal data available. Following many years of use no cases of skin sensitization are noted. There is no evidence that methylene chloride causes respiratory tract sensitization
Germ cell mutagenicity	Methylene chloride induces gene mutations in bacteria, but not in mammalian cells, it is clastogenic in vitro at high concentrations but not clastogenic in vivo via several routes of exposure and there is no evidence of it causing gene mutation in vivo. It is not classified as genotoxic.
Carcinogenicity	Chronic inhalation studies in mice have shown increases in lung and liver tumors, when exposed to concentrations of methylene chloride well in excess of the occupational exposure limit. Extensive mechanistic research has shown that these carcinogenic effects are specific to the mouse and are not relevant to human health. This is due to well established differences in metabolic pathways between rodents and man. Several major studies on humans occupationally exposed to methylene chloride have shown no demonstrable link with cancer.
Reproductive toxicity	No effects in fertility were seen in a two generation toxicity study. No developmental effects were seen in studies of rats and mice.
Specific target organ Toxicity-single exposure (STOT SE)	Vapors may cause drowsiness and dizziness. May cause respiratory irritation.
Aspiration hazard	Not an aspiration hazard

SLIP- RESISTANT NON-FLAMMABLE THINNER

Section 11 – Ecological Information

Toxicity

Acute aquatic toxicity

LC50 (96 hour) (Fish) Fresh water 93 mg/l

LC50 (96 hour) (Fish) Marine water 97 mg/l

LC50 (48 hour) Aquatic invertebrates: Fresh water 27 mg/l

LC50 (48 hour) Aquatic invertebrates: Marine water 109 mg/l

NOEC Fresh water Algae 550 mg/l

Persistence and degradability

Methylene chloride is not hydrolyzed under normal environmental conditions.

The product is slowly biodegradable in water.

Methylene chloride is photochemically oxidized in the troposphere (half life, DT50 is calculated at 79.3 days).

Biodegradability: half-life (bacteria) approximately 18 months. Biodegradability: pseudomonas strain – 0.8g/1hr.

This product is slowly biodegradable in soil. (TD50=14.2 d) The product is substantially removed in biological treatment processes.

There is no evidence of inhibition to the aerobic treatment process at a concentration (mg/l) of 200

Bioaccumulative potential

The product has low potential for bioaccumulation. Bioconcentration factor (BCF): 0.91 to 40l/kg

Mobility in soil

The product is predicted to have high mobility in soil

Results of PBT and vPvB assessment

Not classified as PBT or vPvB

Other adverse effects

None

Section 12 – Disposal Considerations

Waste treatment methods

Disposal should be in accordance with local, state or national legislation. Transfer solvent residues to a labelled, sealed container for disposal or recovery. Waste disposal must be by an accredited contractor. Large volumes may be suitable for redistillation by solvent recovery contractors. Solvent residues must not be allowed to enter drains, sewers or watercourses or to contaminate the ground.

Due to the risk of explosion DO NOT weld, cut or burn drums or other vessels which contain or have contained methylene chloride.

Additional Information

Dispose of this material and its container as hazardous waste.

Section 13 – Transfer Information

UN number	
UN No. (ADR/RID/ADN)	1593
UN No. (IMDG)	1593
UN No. (ICAO/IATA)	1593
ID no. (DOT/TDG)	UN 1593
Proper Shipping Name	Dichloromethane
Transport hazard class(es)	
ADR/RID Class	6.1
IMDG Class	6.1
ICAO-TI Class	6.1
TDG/DOT Class	6.1
ADN Label	6.1
IMDG Label	6.1
ICAO Label	6.1
Packing Group	
ADR Packing Group	III
IMDG Packing Group	III
ICAO Packing Group	III
TDG/DOT Packing Group	III
Environmental hazards	
Marine Pollutant	Not classified as a Marine Pollutant
Special precautions for user	
Hazardous Substances (RQ)	1000 lbs / 454 kg
Tunnel Restriction Code	(E)
Transport in bulk according to ANNEX II of MARPOL73/78 and the IBC Code	
Product Name	Dichloromethane
Ship Type	3
Pollution Category	Y

Section 14 – Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture

US FEDERAL REGULATIONS

OSHA Classification	This product is classified as a "Hazardous Chemical" by definition of Hazard Communication Standard (29 CFR 1910.1200) Occupational exposures to methylene chloride are specifically regulated under 29 CFR 1910.1052
Carcinogen Status	Methylene chloride is listed by NTP as "reasonably anticipated to be a human carcinogen" and by IARC as a Group 2B carcinogen

SLIDER DUTY NON-FLAMMABLE THINNER

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. Recipients are advised to confirm in advance the need that the information is current, applicable, and suitable to their circumstances

SUPER DUTY NON FLAMMABLE THINNER